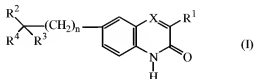


**Listing of Claims:**

*This listing of claims replaces all prior versions, and listings, of claims in the captioned application.*

1. (Original) A compound of formula (I),



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

$n$  is 0, 1 or 2;

$X$  is N or  $CR^5$ , wherein  $R^5$  is hydrogen or taken together with  $R^1$  may form a bivalent radical of formula  $-CH=CH-CH=CH-$ ;

$R^1$  is  $C_{1-6}$ alkyl or thienyl;

$R^2$  is hydrogen or hydroxy or taken together with  $R^3$  or  $R^4$  may form  $=O$ ;

$R^3$  is a radical selected from

- $-(CH_2)_5-NR^6R^7$  (a-1),
- $-O-H$  (a-2),
- $-O-R^8$  (a-3),
- $-S-R^9$  (a-4), or
- $-C\equiv N$  (a-5),

wherein

$s$  is 0, 1, 2 or 3;

$R^6$  is  $-CHO$ ,  $C_{1-6}$ alkyl, hydroxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl, di( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonylamino $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl, piperidinyl, piperidinyl $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl,  $C_{1-6}$ alkyloxy, thienyl $C_{1-6}$ alkyl, pyrrolyl $C_{1-6}$ alkyl, aryl $C_{1-6}$ alkylpiperidinyl, arylcarbonyl $C_{1-6}$ alkyl, arylcarbonylpiperidinyl $C_{1-6}$ alkyl, haloindozolylpiperidinyl $C_{1-6}$ alkyl, or aryl $C_{1-6}$ alkyl( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl;

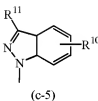
$R^7$  is hydrogen or  $C_{1-6}$ alkyl;

$R^8$  is  $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl or  $di(C_{1-6}alkyl)aminoC_{1-6}alkyl$ ; and  
 $R^9$  is  $di(C_{1-6}alkyl)aminoC_{1-6}alkyl$ ;  
 or  $R^3$  is a group of formula

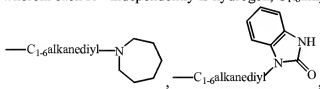


wherein


Z is a heterocyclic ring system selected from



wherein each  $R^{10}$  independently is hydrogen,  $C_{1-6}$ alkyl, aminocarbonyl, hydroxy,



$C_{1-6}alkyloxyC_{1-6}alkyl$ ,  $C_{1-6}alkyloxyC_{1-6}alkylamino$ ,  $arylC_{1-6}alkyl$ ,  
 $di(phenylC_{2-6}alkenyl)$ ,  $piperidylC_{1-6}alkyl$ ,  $C_{3-10}cycloalkyl$ ,  $C_{3-10}cycloalkylC_{1-6}alkyl$ ,  
 $aryloxy(hydroxy)C_{1-6}alkyl$ ,  $haloindazolyl$ ,  $arylC_{1-6}alkyl$ ,  $arylC_{2-6}alkenyl$ ,  $morpholino$ ,  $C_{1-6}alkylimidazolyl$ , or  $pyridinylC_{1-6}alkylamino$ ;

$R^4$  is hydrogen,  $C_{1-6}alkyl$ ,  $furanyl$ ,  $pyridinyl$ ,  $arylC_{1-6}alkyl$  or  ;

$aryl$  is  $phenyl$  or  $phenyl$  substituted with  $halo$ ,  $C_{1-6}alkyl$  or  $C_{1-6}alkyloxy$ ;

with the proviso that when

$n$  is 0,  $X$  is N,  $R^2$  is hydrogen,  $R^3$  is a group of formula (b-1), Z is the heterocyclic ring system (c-2) or (c-4) wherein said heterocyclic ring system Z is attached to the rest of the molecule with a nitrogen atom, and  $R^{10}$  is hydrogen; then

$R^4$  is other than  $C_{1-6}alkyl$  or  $pyridinyl$ .

2. (Original) A compound as claimed in claim 1 wherein  
n is 0 or 1; X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen; R<sup>3</sup> is a radical selected from (a-1), (a-2)  
or (a-3) or is a group of formula (b-1) i.e. -Z-, s is 0, 1 or 2; R<sup>6</sup> is -CHO, C<sub>1-6</sub>alkyl,  
piperidinyC<sub>1-6</sub>alkyl, arylcarbonylpiperidinyC<sub>1-6</sub>alkyl or  
arylC<sub>1-6</sub>alkyl(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl; R<sup>8</sup> is C<sub>1-6</sub>alkyl; when R<sup>3</sup> is a group of formula (b-1)  
then Z is a heterocyclic ring system selected from (c-2) or (c-4); and each R<sup>10</sup>  
independently is hydrogen, C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkylamino.

3. (Previously Presented) A compound according to claim 1 wherein  
n is 0; X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen; R<sup>1</sup> is C<sub>1-6</sub>alkyl;  
R<sup>2</sup> is hydrogen or hydroxy or taken together with R<sup>4</sup> may form =O; R<sup>3</sup> is a radical selected  
from (a-1) or (a-2); s is 0 or 1; R<sup>6</sup> is -CHO or C<sub>1-6</sub>alkyl; and R<sup>4</sup> is hydrogen, C<sub>1-6</sub>alkyl or



4. (Currently Amended) A compound selected from the group consisting of:

<p>compound 1</p>	<p>compound 5</p>
<p>compound 7</p>	<p>compound 3</p>
<p>compound 17</p>	

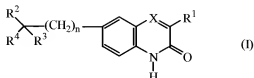
and the N-oxide forms, the pharmaceutically acceptable addition salts and the stereo-  
chemically isomeric forms thereof.

5. (Cancelled)

6. (Previously Presented) A pharmaceutical composition comprising pharmaceutically  
acceptable carriers and as an active ingredient a therapeutically effective amount of a  
compound as claimed in claim 1 .

7. (Cancelled).

8. (Currently Amended) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of formula (I)



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

*n* is 0, 1 or 2;

X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen or taken together with R<sup>1</sup> may form a bivalent radical of formula -CH=CH-CH=CH-;

R<sup>1</sup> is C<sub>1-6</sub>alkyl or thienyl;

R<sup>2</sup> is hydrogen or hydroxy or taken together with R<sup>3</sup> or R<sup>4</sup> may form =O;

R<sup>3</sup> is a radical selected from

- (CH<sub>2</sub>)<sub>s</sub>- NR<sup>6</sup>R<sup>7</sup> (a-1),
- O-H (a-2),
- O-R<sup>8</sup> (a-3),
- S- R<sup>9</sup> (a-4), or
- C≡N (a-5),

wherein

*s* is 0, 1, 2 or 3;

R<sup>6</sup> is -CHO, C<sub>1-6</sub>alkyl, hydroxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylcarbonyl,

di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylcarbonylaminoC<sub>1-6</sub>alkyl,

piperidinylC<sub>1-6</sub>alkylaminocarbonyl, piperidinyl, piperidinylC<sub>1-6</sub>alkyl,

piperidinylC<sub>1-6</sub>alkylaminocarbonyl, C<sub>1-6</sub>alkyloxy, thienylC<sub>1-6</sub>alkyl,

pyrrolylC<sub>1-6</sub>alkyl, arylC<sub>1-6</sub>alkylpiperidinyl, arylcarbonylC<sub>1-6</sub>alkyl,

arylcarbonylpiperidinylC<sub>1-6</sub>alkyl, haloindozolylpiperidinylC<sub>1-6</sub>alkyl, or

arylC<sub>1-6</sub>alkyl(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl;

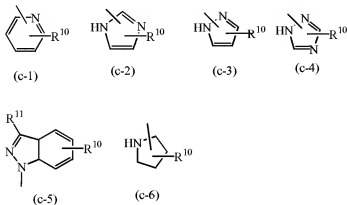
R<sup>7</sup> is hydrogen or C<sub>1-6</sub>alkyl;

$R^8$  is  $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl or  $di(C_{1-6}alkyl)aminoC_{1-6}alkyl$ ; and  
 $R^9$  is  $di(C_{1-6}alkyl)aminoC_{1-6}alkyl$ ;  
or  $R^3$  is a group of formula

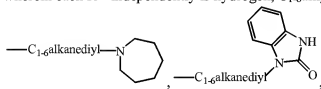


wherein


Z is a heterocyclic ring system selected from



wherein each  $R^{10}$  independently is hydrogen,  $C_{1-6}$ alkyl, aminocarbonyl, hydroxy,



$C_{1-6}alkyloxyC_{1-6}alkyl$ ,  $C_{1-6}alkyloxyC_{1-6}alkylamino$ ,  $arylC_{1-6}alkyl$ ,  
 $di(phenylC_{2-6}alkenyl)$ ,  $piperidylC_{1-6}alkyl$ ,  $C_{3-10}cycloalkyl$ ,  $C_{3-10}cycloalkylC_{1-6}alkyl$ ,  
 $aryloxy(hydroxy)C_{1-6}alkyl$ ,  $haloindazolyl$ ,  $arylC_{1-6}alkyl$ ,  $arylC_{2-6}alkenyl$ ,  $morpholino$ ,  $C_{1-6}alkylimidazolyl$ , or  $pyridinylC_{1-6}alkylamino$ ;

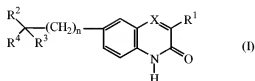
$R^4$  is hydrogen,  $C_{1-6}alkyl$ ,  $furanyl$ ,  $pyridinyl$ ,  $arylC_{1-6}alkyl$  or  ;

$aryl$  is phenyl or phenyl substituted with halo,  $C_{1-6}alkyl$  or  $C_{1-6}alkyloxy$ .

9. (Cancelled)

10. (Previously Presented) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

11. (Previously Presented) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy
12. (Original) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of formula (I)



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

*n* is 0, 1 or 2;

X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen or taken together with R<sup>1</sup> may form a bivalent radical of formula -CH=CH-CH=CH-;

R<sup>1</sup> is C<sub>1-6</sub>alkyl or thienyl;

R<sup>2</sup> is hydrogen or hydroxy or taken together with R<sup>3</sup> or R<sup>4</sup> may form =O;

R<sup>3</sup> is a radical selected from

-(CH<sub>2</sub>)<sub>5</sub>-NR<sup>6</sup>R<sup>7</sup> (a-1),

-O-H (a-2),

-O-R<sup>8</sup> (a-3),

-S- R<sup>9</sup> (a-4), or

—C≡N (a-5),

wherein

*s* is 0, 1, 2 or 3;

R<sup>6</sup> is -CHO, C<sub>1-6</sub>alkyl, hydroxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylcarbonyl,

di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylcarbonylaminoC<sub>1-6</sub>alkyl,

piperidinylC<sub>1-6</sub>alkylaminocarbonyl, piperidinyl, piperidinylC<sub>1-6</sub>alkyl,

piperidinylC<sub>1-6</sub>alkylaminocarbonyl, C<sub>1-6</sub>alkyloxy, thienylC<sub>1-6</sub>alkyl,

pyrrolylC<sub>1-6</sub>alkyl, arylC<sub>1-6</sub>alkylpiperidinyl, arylcarbonylC<sub>1-6</sub>alkyl,  
arylcarbonylpiperidinylC<sub>1-6</sub>alkyl, haloindozolylpiperidinylC<sub>1-6</sub>alkyl, or  
arylC<sub>1-6</sub>alkyl(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl;

R<sup>7</sup> is hydrogen or C<sub>1-6</sub>alkyl;

R<sup>8</sup> is C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylcarbonyl or di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl; and

R<sup>9</sup> is di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl;

or R<sup>3</sup> is a group of formula



wherein

Z is a heterocyclic ring system selected from



(c-1)



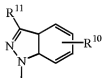
(c-2)



(c-3)



(c-4)

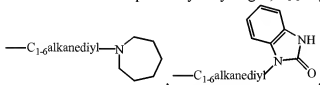


(c-5)




(c-6)

wherein each R<sup>10</sup> independently is hydrogen, C<sub>1-6</sub>alkyl, aminocarbonyl, hydroxy,

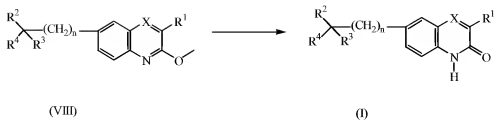


C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkylamino, arylC<sub>1-6</sub>alkyl,  
di(phenylC<sub>2-6</sub>alkenyl), piperidinylC<sub>1-6</sub>alkyl, C<sub>3-10</sub>cycloalkyl, C<sub>3-10</sub>cycloalkylC<sub>1-6</sub>alkyl,  
aryloxy(hydroxy)C<sub>1-6</sub>alkyl, haloindazolyl, arylC<sub>1-6</sub>alkyl, arylC<sub>2-6</sub>alkenyl, morpholino, C<sub>1-6</sub>  
alkylimidazolyl, or pyridinylC<sub>1-6</sub>alkylamino;

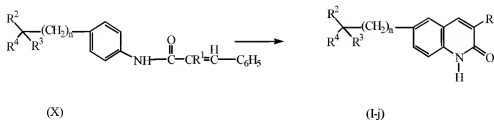
R<sup>4</sup> is hydrogen, C<sub>1-6</sub>alkyl, furanyl, pyridinyl, arylC<sub>1-6</sub>alkyl or  ;

aryl is phenyl or phenyl substituted with halo, C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkyloxy.

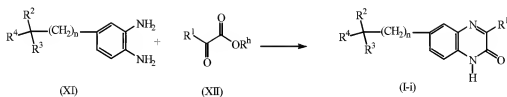
13. (Previously Presented) A process for preparing a compound as claimed in claim 1,  
comprising: a) hydrolysis of intermediates of formula (VIII),



b) cyclization of intermediates of formula (X),



c) condensation of an ortho-benzenediamine of formula (XI) with an ester of formula (XII) wherein R<sup>b</sup> is C<sub>1-6</sub>alkyl, into compounds of formula (I), wherein X is N, herein referred to as compounds of formula (I-i),



14. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 2.

15. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 3.

16. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 4.



17. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 2.

18. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

19. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

20. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 3.

21. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

22. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

23. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 4.

24. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

25. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
26. (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 2.
27. (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 3.
28. (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 4.
29. (New) A product made by the process of claim 13.
30. (New) A pharmaceutical composition made by the process of claim 13.